ABSTRACT

There is provided an optically active copper catalyst composition comprising

(a) an optically active salicylideneaminoalcohol represented by the formula (1):

$$R^1$$
 R^2
 R^2
 OH
 OH
 (1)

5

10

15

wherein R^1 and R^2 are the same or different, and independently represent a substituted or unsubstituted lower alkyl group, a substituted or unsubstituted aralkyl group, or a substituted or unsubstituted aryl group; X^1 and X^2 are the same or different, and independently represent a hydrogen atom, a lower alkoxy group, a nitro group, a lower alkoxycarbonyl group, a cyano group or a halogen atom; and * represents an asymmetric center, provided that both of X^1 and X^2 don't represent hydrogen atoms,

- (b) a monovalent or divalent copper compound, and(c-1) a lithium compound or
- (c-2) a compound selected from aluminum compounds having

 Lewis acidity, titanium compounds having Lewis acidity,

 boron compounds having Lewis acidity, zirconium compounds

 having Lewis acidity and hafnium compounds having Lewis

acidity; and a process for producing an optically active cyclopropane compound by using the same.